School Nurse Toolkit: Student Overweight/Obesity

What school nurses need to consider in assessing and communicating with overweight/obese students

Iowa Department of Public Health Bureau of Nutrition and Health Promotion Nutrition and Physical Activity Program

Fall, 2011

Updated May, 2013





www.idph.state.ia.us/iowansfitforlife/

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Acknowledgements

The Iowa Department of Public Health would like to express our deep appreciation to Dr. Sharon Guthrie, Assistant Professor of Nursing, and the Fall 2011 Mount Mercy University Health Promotion/Disease Prevention (NU503) MSN Students for reviewing and editing the School Nurse Toolkit: Student Overweight/Obesity.

Understanding Childhood Obesity

The Dramatic Rise in Obesity

If current trends continue without attention, today's children will become the first generation to live shorter life spans than their parents. Between 1980 and 2000, there was a two-fold increase in overweight/obese children (i.e., 6- to 11-years old) and a three-fold increase in overweight/obese adolescents. Being overweight in adolescence has been associated with an increased risk of death among adult males and a variety of diseases such as diabetes and cardiovascular disease in both adult males and females. Significant health disparities exist with African American and Latino children and youth showing significantly higher rates of being overweight and obesity.

Definition of Overweight and Obesity

The clinical definition of childhood overweight and obesity is based on the ratio of weight to height using age and gender specific references. The Body Mass Index (BMI) is a widely accepted measure for adiposity. The Centers for Disease Control and Prevention (CDC) and the American Academy of Pediatrics (AAP) recommend the use of the BMI to screen for overweight children beginning at two years of age. BMI is calculated by dividing weight (kilograms) by height (meters) squared. A child or adolescent is considered obese when the BMI is at or above the 95th percentile, with respect to gender-specific BMI for age growth charts provided by the CDC. When the BMI is at or above the 85th percentile, but less than the 95th percentile, a child or adolescent is defined as overweight. BMI is only a screening tool, not a diagnostic tool. A child may have a high BMI for age and gender, but to determine if overweight is a problem, other assessments need to be performed. These assessments may include skinfold thickness measurement, diet and physical activity evaluation, and family history. As of June 2007, the American Medical Association/CDC Expert Committee on Childhood Obesity groups children as follows:

BMI Percentile	Nutritional Status
< 5th Percentile	Underweight
5th - 84 th Percentile	Healthy Weight
85th - < 95th Percentile	Overweight*
≥ 95th Percentile	Obese**
>99th Percentile	Classification of BMI in this percentile should be noted in the patient's chart

^{*} Formerly classified as "at-risk for overweight"

^{**} Formerly classified as "overweight"

Risk Factors

Factors contributing to the epidemic of overweight/obesity among children include:

- Childhood Lifestyle Factors
- Family Influences & Parental Modeling
- Community Influences

Childhood Lifestyle Factors

Diet – Before children can make their own food choices, diet influences the development of becoming overweight/obese. Breastfeeding has been shown to have a preventive effect on a child becoming overweight/obese. High levels of sweetened beverages, including fruit juices with high sugar content, are associated with an increased risk of overweight/obesity. Fruit and vegetable consumption, along with consumption of foods with low caloric density and water, have shown a positive effect on body weight.

Physical Activity – A dramatic link between sedentary behavior and overweight/obesity has been documented. When children watch television or play video games, they experience a decrease in energy output. Children with televisions in their bedrooms have also been shown to have lower levels of physical activity compared to children without televisions in their bedrooms, thus contributing to overweight/obese.

Family Influences & Parental Modeling

Children with two obese parents are 10 times more likely to become overweight when compared to children with non-obese parents. The prenatal environment also influences the development of overweight/obesity among children, as well. Children born to mothers with gestational diabetes have an increased risk of overweight, as do children with higher birth weights. An infant with a birth weight of 4,000 grams (8.8 pounds) or greater is more likely to become an overweight child or adult than an infant whose birth weight is low or within the normal range. Less than five percent of childhood obesity can be attributed to endocrine and genetic disorders.

Parents are role models for their children. When parents eat a healthy diet and are physically active, they help their children make the same healthy choices. In addition, parents can create family habits that establish a support system in which everyone helps to make healthy food and physical activity choices. Parents can also monitor the amount of television their children watch on a daily basis and limit the number of televisions in the house, and limit the number of hours the television is on. The average American family today dines outside of the home on a regular basis, often consuming "super-sized" servings of food on a regular basis. Restaurant and fast food chains offer meals will come in larger portions than necessary. In this way, restaurants help redefine what society believes to be a "normal portion," and children learn at an early age to expect more food each time they eat.

Community Influences

Community influences can contribute to a child's risk for becoming overweight. These include:

- Access to healthy food, especially fresh fruits and vegetables. Many low income neighborhoods are without full service grocery stores or farmers' markets.
- Schools in lower-income neighborhoods are less likely to have resources for physical activity, both during and after the school day.
- Neighborhoods may not have parks to play in or sidewalks for safe walking or bike riding.
- The neighborhood may not be safe and may limit opportunities for outdoor physical activity.

Health Conditions Associated with Overweight and Obesity

Roughly 60 percent of overweight/obese children ages 5 to 10 have at least one cardiovascular risk factor associated with being overweight, including hyperlipidemia, high low density lipoproteins (LDL), low high density lipoproteins (HDL) and high triglycerides, abnormal glucose metabolism and elevated blood pressure.³ Studies indicate that as many as 39 percent of pediatric patients whose BMI is greater than the 95th percentile have at least two complications.⁴ It is important to screen for co-morbidities that may be associated with overweight/obesity. Health consequences of overweight/obesity include those listed below.⁵

Health Conditions by Body System

Cardiovascular	Orthopedic	Endocrine	Psychological
 Dyslipidemia Hypertension Left Ventricle Hypertrophy Atherosclerosis 	 Slipped Capital Femoral Epiphysis Blount's disease 	Metabolic Syndrome Diabetes Mellitus Type 2 Polycystic Ovarian	 Quality of Life Depression Negative Self- Image
		Syndrome	

Hepatic	Pulmonary	Nervous	Reproductive
Nonalcoholic SteatohepatitisNonalcoholic Fatty Liver Disease	AsthmaObstructiveSleep Apnea	Pseudotumor Cerebri	OligomenorrheaAmenorrhea

Office Resources

Organizing the Office

School nurses are on the front lines of addressing the overweight/obesity epidemic. The office environment provides opportunities to communicate preventive care messages focusing on healthy weight. Below are listed some suggestions on ways to display preventive health messages addressing healthy eating and physical activity.

Organizing the Waiting Area

- Posters are most effective when placed in areas where students and parents are not otherwise engaged in communication with the school nurse.
- Posters can reinforce verbal advice given by a school nurse during the visit.
- Consider setting up sections or tables that address different health topics. For example, there can be a nutrition section with recipes for healthy foods, handouts and a resource list of programs for overweight children.
- Place a brochure rack in the waiting area that contains handouts focusing on healthy eating, physical activity, and tips for families wanting to become more involved in their children's diet and activity choices.
- Post a list of community sports and physical activity programs that children can sign up for.
- Consider having open-armed chairs that can support a child, adolescent or family member of larger size or heavier weight.

School Nurse's Office

The school nurse's office presents the opportunity to convey health messages. Posters can be placed in locations that are at the eye level of the child or parent. A brochure or pamphlet rack can be placed in other rooms. Rooms might also have themes such as a "healthy eating" room and a "physical activity" room. Have handouts available for students on the key topics associated with their preventive visit on healthy eating or physical activity, and provide these at the end of each visit and send home to share with parents. You may want to add a body weight scale with a capacity of 300 pounds or more. Blood pressure cuffs should be large enough to cover 80 percent of a patient's arm.

Leading by Example

- Be sure that the school staff habits reflect a healthy environment. Encourage healthy snacks and lunches. Keep food in the staff lunchroom instead of at the reception desk.
- Avoid using food as a reward for children. Use stickers, pencils and other non-food items to convey a healthy message to children and their parents.
- If the school has vending machines, they should be stocked with water, 100 percent fruit juices and other healthy snacks instead of candy, chips or sodas.
- Demonstrate your personal commitment to maintaining a healthy weight. Take time during the day to go for a walk or wear a pedometer in the office. School nurses can set up a "Walk with Your School Nurse" program, meeting students for a weekly walk.

Properly prepared and equipped space for screening

- Adequate time for screening, as well as provisions for student supervision, access to proper equipment, and environmental accommodation are necessary to ensure appropriate assessment and individual privacy.
- Each student should be weighed and measured in private with no other students present.
- Space should be arranged so that confidentiality is assured, in terms of both sight and sound. In order to promote confidentiality of results and reduce anxiety, all students should be weighed and measured facing away from the scales.
- Care should be taken that findings are never accessible to other students.

Appropriate and wellmaintained screening equipment

Be sure to use appropriate equipment that has been properly maintained and calibrated.

Involving Staff

While the child is weighed and his or her BMI is calculated, the school nurse can ask questions about the student's meals, diet, physical activity levels, video game usage and television watching. Record this information on a routine assessment form and place in the student's chart.

Chart Prompts

Offices vary in the type of prompts that trigger a focus for the visit. It is important that the school nurse gets in the habit of recording the student's BMI. If a paper chart is being used, a chart sticker or prompt can be placed to remind the school nurse to calculate the child's BMI. The sticker can include the BMI and indicate where the child fits it the continuum from underweight to obese.

BMI: _____
Height: ____
Weight: ____

± Underweight
± Normal Weight Range
± Overweight
± Obese

Protocols to assure privacy of the screening process and confidentiality of results

- Students react in a variety of ways to being weighed and measured at school. Girls are most often concerned about being overweight regardless of their actual size. Boys worry about being short and too thin. School nurses should be prepared to be objective, calm and open to students' concerns.
- Students' growth screening results are part of the health record, and, as such, are strictly confidential and should not be discussed with anyone other than the student and his/her parent or guardian and healthcare provider. Some students may need to meet with the school nurse at a later time to discuss their concerns; be sure to do so in a space that will respect the student's privacy.

Guidelines for Collecting Height and Weight Measurements of Children and Adolescents in the School Setting

Checklist

- Notify students, parents/guardians, school staff and administrators and local primary care providers prior to implementation of the screening program. Explain the process to parents and let them know when to expect the screening results in the mail.
- Review confidentiality and communication issues.
- Be sure that appropriate equipment is available and has been properly maintained and calibrated.
- Prepare space for screening. Be sure to provide a private setting for measurement of heights and weights.
- Provide educational materials on healthy eating and physical activities to students and parents.

Protocols for Measuring Height and Weight

To accurately weigh and measure students, the following procedures should be followed:

Weight

- Make sure that the scale is on a firm surface, preferably an uncarpeted floor.
- Set the scale at zero.
- Have student remove their shoes.
- Have student remove heavy outer clothing, such as sweater, jacket, or vest.
- Have the student step on scale platform, facing you, with both feet on platform, and remain still.
- Read weight value to nearest ½ pound or .1 (1/10) kilogram.
- Record weight immediately on the data form before student gets off scale.
- If using a balance beam scale, return weights to the zero position.

Height

- Have student remove shoes and hat.
- Have student remove hair ornaments, buns, braids to extent possible (note on chart if unable to obtain an accurate measurement, don't "guesstimate" height of hairdo).
- Have student stand on footplate portion with back against stadiometer rule.
- Have student bring legs together, contact at some point (whatever touches first).
- Make sure that the knees are not bent, arms are at sides, and shoulders are relaxed.
- Make sure that the back of the student's body touches/has contact with stadiometer at some point.
- Make sure that the body is in a straight line (mid-axillary line parallel to stadiometer). Check to see if the student's head is in appropriate position. You should be able to draw a straight (perpendicular) line from the back of the board, past the ear opening and the top of the cheek bone. You can use a pencil or ruler to help check the line. This is called the Frankfort plane.
- Lower headpiece snugly to crown of head with sufficient pressure to flatten hair.
- Read value at eye level; read in an upward direction (from lowest to higher number).
- Measure to nearest .1 cm or 1/8 inch and record value.
- Repeat measurement, having the child line-up again, and record appropriate value immediately on data form.



The Student Visit to the School Nurse's Office

The student visit is the ideal time to address issues of healthy eating and physical activity and provide counseling on healthy weight and physical activity.

The first step in this process is the calculation of the BMI. The AAP recommends the BMI be calculated on a yearly basis for children 2 years and older.

BMI is calculated as follows:

Weight in kilograms (kg) divided by the square of height in meters squared (m ²).	Weight in pounds (lbs) divided by the square of height in inches squared (in²) multiplied by 703.
BMI = Weight (kg)	BMI = Weight (lbs) x 703
Height squared (m ²)	Height squared (in²)

There are numerous methods available for calculating BMI:

- Mathematical formula (see above)
- BMI Wheel Calculator
 - Align weight and height values. Read BMI in the windows at the bottom of the wheel. If weight or height exceeds child limits, use the adult side of the BMI wheel. (This is a great resource, especially for offices without internet access.)
- Online BMI calculator
 - http://apps.nccd.cdc.gov/dnpabmi/calculator.aspx

Calculating, Plotting, and Tracking BMI and BMI Percentile

Four steps should be followed to ensure accurate tracking of BMI:

- 1. Accurately measure weight and height (see Protocol for Measuring Height and Weight, p. 9).
- 2. Calculate BMI using one of the methods listed above.
- 3. Plot BMI for age and sex on the CDC BMI Growth Charts (see pages 15-16) to determine the student's BMI percentile.
- 4. Record BMI and BMI percentile in the student's chart.

Sample Calculation

Charles is a 10-year-old boy who is 4'7" tall and weighs 100 pounds.

What is Charles' BMI?

BMI = (weight [lbs] / [height (inches)]²) x 703

BMI = (100/[55]²) x703

BMI = 23.2

What does a BMI of 23.2 for Charles represent?

According to the CDC's gender and age specific charts for BMI (see p. 16), Charles' BMI is greater than the 95th percentile. Therefore, Charles is obese.

BMI Percentile	Nutritional Status
< 5th Percentile	Underweight
5th - 84 th Percentile	Healthy Weight
85th - < 95th Percentile	Overweight
≥ 95th Percentile	Obese
>99th Percentile	Classification of BMI in this percentile
	should be noted in the patient's chart

Student Evaluation

The student's nutritional status, eating habits and physical activity patterns should be routinely evaluated, along with identifying risk factors for overweight/obesity within the family. It is important to ask open-ended questions. A question to open the discussion might be:

• How do you feel about us discussing your physical activity, TV watching, and eating habits today?

Next, follow up with more focused questions addressing both physical activity and eating and nutrition.

A sample student questionnaire is located on page 14. Some questions to consider in the evaluation include:

Physical Activity Questions

- How many hours of television do you watch each day?
- How many hours do you spend playing video games each day?
- How often do you play outside? Is it safe to do so?
- How often does your family do something active together? What might that include?
- How often does your parent play actively with you?

Eating & Nutrition Questions

- What does your family eat in a typical day?
- Do you have breakfast? What is typically included in your breakfast
- When eating at home, does your family routinely eat while watching the TV?
- How often does your family eat out each week?
- · How often are fruits and vegetables served as part of your meals?
- · What sort of snacks are around the house?
- How many sodas or sweetened beverages do you drink each day?

The Medical Examination

When a child is diagnosed as overweight or obese, a more detailed medical evaluation should be performed to determine co-morbid conditions and the child's cause(s) of overweight/obesity. Children who are candidates for a more in-depth evaluation include:

- Child with a BMI > 85% plus any of the following factors a family history of overweight/obesity, elevated blood pressure or a large increase in BMI.
- Child with a BMI > 95%.
- · Child with a rapid increase in BMI.



Childhood Obesity Assessment Algorithm¹

• Calculate BMI based on height & weight Determine percentile by plotting BMI on growth chart Diagnose nutrition status for obesity •Measure blood pressure & pulse •Take a focused family history (e.g., Type 2 diabetes) Diet behaviors Physical activity behaviors Assess health Attitudes behaviors & Fasting lipid profile • ALT, AST Fasting glucose Refer for appropriate lab tests • Other tests as indicated by health risks Example 5 fruits and vegetables • 2 hours or less of tv daily • 1 hour or more physical actiity evidence-based messa to all students • 0 sweetened beverages Prevention counseling Structured weight management Determine course of action

Risk Factors

Family history of overweight/obesity

Diet behaviors

Physical activity behaviors

Ethnicity

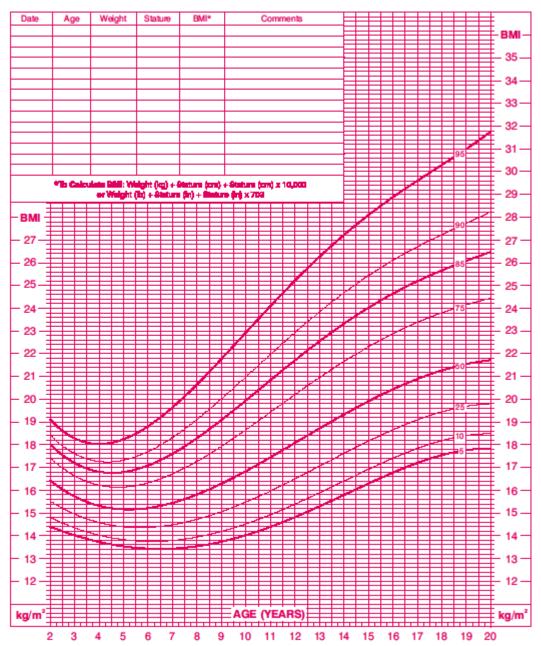
¹ Adapted from NICHQ Childhood Obesity Action Network Implementation Guidelines.

Healthy Lifestyle Questionnaire

Student Name	Date
How many hours of television 0 - 2 3 - 5 more than 5	on do you watch each day?
How many hours do you sp 0 - 2 3 - 5 more than 5	end playing video or computer games each day?
How often do you play outsi Daily Sometimes Rarel	
Is it safe for you to play outs Yes No	side?
How often does your family Daily Sometimes Rarel	do something active together? ly Never
Examples of activity	
How often does your parent Daily Sometimes Rarel	
What do you eat in a typical Breakfast	I day?
Lunch	
Dinner	
Snacks	
Do you eat breakfast every Yes No	day?
When eating at home, does Yes No	s your family routinely eat while watching TV?
How often does your family Daily Sometimes Rarel	
How often are fruits and veg Daily Sometimes Rarel	getables included as part of your meals? ly Never
	ened beverages do you drink each day? than 3

2 to 20 years: Girls Body mass index-for-age percentiles



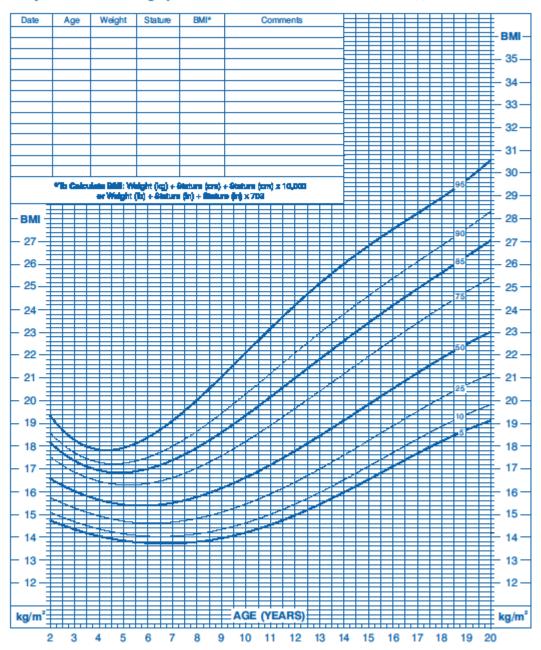


Published May 30, 2000 (modified 10/16/00).
SOURCE: Developed by the National Center for Health Statistics in collaboration with
the National Center for Chronic Disease Prevention and Health Promotion (2000).
http://www.cdc.go.of/growth.ch.ads



2 to 20 years: Boys Body mass index-for-age percentiles





Published May 30, 2000 (modified 10/16/00).

SOURCE: Developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000). http://www.cdc.gov/growth.charts



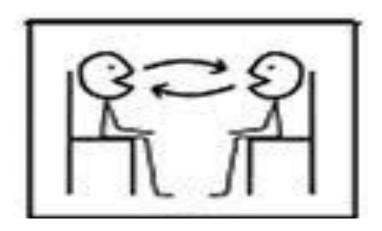
Communication: Motivational Interviewing

Techniques for Initiating Communication

Type of Advice	Appointment Type	Time Commitment	Who
Lifestyle advice	Well child visit	< 1 minute	Children not currently
	Urgent visit		overweight
Brief, focused advice	Well child visit	< 3 minutes	Children who are
			overweight or obese
Brief negotiation and	Follow-up visit	> 10 minutes: Single	Children who are
cognitive behavioral	 Weight management 	or multiple sessions	overweight or obese
skills	intervention		

Assessing Readiness for Change

Determining a child's readiness for change is essential for success. Discussing changes when a child is not ready often leads to resistance, denial of problems and frustration that may hamper future efforts. The following tool provides a basis for starting discussions with children and parents.



Effective Communication with Families⁶

Communication Techniques

Lifestyle AdviceAdvice

- < 1 minute</p>
- Children not currently overweight or obese

Brief Focused Advice - Well Child Visit

- < 3 minutes</p>
- Children who are overweight or obese

Brief Negotiation & Cognitive Behavioral Skills – Weight Management Intervention

- 10 + minutes: single or multiple sessions
- Children who are overweight or obese

Who Do You Communicate With?

6 - 12 Years Old

- Communicate with parent or both parent & child
- The first encounter, consider taking parent to your office to discuss in private

Over 12 Years Old

- Communicate with teen or both parent & teen
- The first encounter, consider having parent leave exam room first

Brief Negotiation Skills

Particularly Effective for Contemplative/Ambivalent Students

- Asking open ended questions
- Listening
- Summarizing
- Clinician Style: empathetic, accepting,
- collaborative

Cognitive Behavior Skills

For Students Ready and Willing to Make Changes

- Develop awareness of eating habits, activity and parenting behavior
- Identification of problem behaviors

Lifestyle Advice

To stay healthy and energized:

- Get up and play hard for 30-60 minutes a day
- Limit TV and video games to 60 minutes or less a day
- Eat 5 servings of fruits or vegetables every day
- Limit sodas & juice drinks to 1 cup or less a day

Brief Focused Advice

Step # 1: Engage the Child/Parent

- Can we take a few minutes together to discuss your health and weight?
- How do you feel about your health and weight?

Step # 2: Share Information (optional)

- Your current weight puts you at risk for developing heart disease and diabetes.
- What does this mean to you?
- Some ideas for staying healthy include...(see poster)
- What are your ideas for working toward a healthy weight?

Step # 3: Make a Key Advice Statement I strongly encourage you to...

- Get up and play hard, 30-60 minutes a day
- Limit TV and video games to 60 minutes or less a day
- Eat 5 helpings of fruits or vegetables every day
- Limit sodas and juice drinks to 1 cup or less a day
- Use patient ideas from step # 2

Step # 4: Arrange for Follow up

- Would you be interested in more information on ways to reach a healthier weight? AND / OR
- Let's set up an appointment in __weeks to discuss this further.

Brief Negotiation

Open the Encounter: Ask Permission

- "Would you be willing to spend a few minutes discussing your weight?"
- "Are you interested in discussing ways to stay healthy and energized?"

Ask an Open-Ended Question — Listen — Summarize

- "What do you think/How do you feel about your weight?"
- "What have you tried so far to work toward a healthier weight?"

Share BMI/Weight/Risk Factors (Optional)

- Your current weight puts you at risk for developing heart disease and diabetes.
- Ask for the student's interpretation: "What do you make of this?"
- Add your own interpretation or advice as needed AFTER eliciting the student/parent response

Negotiate the Agenda

- "There are a number of ways to achieve a healthy weight. They include:"
- Get up and Play Hard
- Eat 5 helpings of fruits and vegetables a day
- Cut back on TV and Video Games
- Cut down on soda and juice
- "Would you like to discuss any of these further today—or perhaps you have another idea that isn't listed here?"

2

1

3

Assess Readiness

"On a scale from 0 to 10, how ready are you to consider (option chosen above)"

- Straight question: "Why a 5?"
- Backward guestion: "Why a 5 and not a 3?"
- Forward question: "What would it take to move you from a 5 to a 7?"

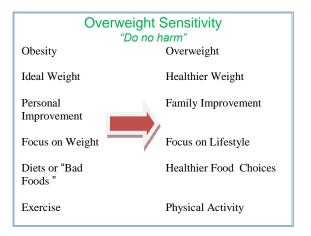
Explore Ambivalence

Step 1: Ask a pair of questions to help the patient explore the pros and cons of the issue:

- What are the things you like about_____? And What are the things you don't like about_____?
- What are the advantages of keeping things the same? *And* What are the advantages of making a change?

Step 2: Summarize Ambivalence:

- "Let me see if I understand what you've told me so far..."
- Begin with reasons for maintaining the status quo, end with reasons for making a change
- Ask: "Did I get it all? / Did I get it right?"



7

5

6

8

9

10

Stage of Readiness

Not Ready: 0 - 3

- Raise Awareness
- Elicit Change Talk
- Advise and Encourage

Unsure: 4 – 6

- Evaluate Ambivalence
- Elicit Change Talk
- Build Readiness

Ready: 7 - 10

- Strengthen Commitment
- Elicit Change Talk
- Facilitate Action Planning

Key Question

- Would you be interested in knowing more about reaching a healthy weight?
- How can I help?
- What might need to be different for you to consider a change in the future?
- Where does that leave you now?
- What do you see as your next steps?
- What are you thinking / feeling at this point?
- Where does fit into your future?
- Why is this important to you now?
- What are your ideas for making this work?
- What might get in the way? How might you work around the barriers? How might you reward yourself along the way?

Close the Encounter

- Summarize: "Our time is almost up. Let's take a look at what you've worked through today..."
- Show Appreciation / Acknowledge willingness to discuss change: "Thank you for being willing to discuss your weight."
- Offer advice; emphasize choice, and express confidence: "I strongly encourage you to be more physically active. The choice to increase your activity, of course, is entirely yours. I am confident that if you decide to be more active you can be successful."
- Confirm next steps and arrange for follow up: "Are you able to come back in a couple weeks so we can continue to work together?"

Sample Dialogue of a Brief Negotiations Encounter

Before entering the school nurse's office, note the student's age, gender, BMI and percentile, blood pressure, and pulse which you may have taken.

Student Info:

Name	Charles
Gender	Male
Age	10 years
Ethnicity	White
Height	55 inches
Weight	100 lbs
ВМІ	23.2 (95 th percentile for age and gender)

Example of Brief Negotiations Encounter

School Nurse: Good morning! I see you are in for your annual school nurse visit. Do you have any concerns about your health?

Charles: No, my mom made me come in.

School Nurse: Can we take a few minutes together to talk about your health and weight?

Charles: I guess so.

School Nurse: How do you feel about your weight?

Charles: I know I'm bigger than most kids.

School Nurse: Have you tried to do anything to get to a healthier weight?

Charles: Not really - I just eat what all my friends eat.

School Nurse: Your family has a history of diabetes. Did you know that your current weight

makes you more likely to develop diseases like diabetes?

Charles: No. My grandpa always complains about his diabetes.

School Nurse: Yes, diabetes is not easy to live with – I can understand why he complains. OK, well let's see what we can do to help you be healthy. Here are some ideas that my patients usually find helpful: eating at least 5 fruits and vegetables per day, cutting back on the number of sodas they drink, being physically active for 30 minutes or more, and reducing the amount of time they spend watching TV or playing on the computer. Do you want to talk about any of these, or do you have any other ideas?

Charles: Would riding my bike to school count as physical activity?

School Nurse: It sure would! On a scale from 1 to 10, how ready do you think you are to start riding your bike to school? 10 would be the most ready and 1 the least ready.

Charles: Probably a 5.

School Nurse: Why a 5?

Charles: Well, I don't have anyone to ride with and there are a couple of busy streets.

School Nurse: I see how that would make it sort of scary. What sounds good about riding your bike to school?

Charles: Riding my bike is pretty fun. And I wouldn't have to wait in traffic in the car and be late for school.

School Nurse: So the busy streets and having no one to ride with may make this change difficult, but you like to ride your bike and traffic wouldn't make you late for school if you were on your bike. Did I get it right?

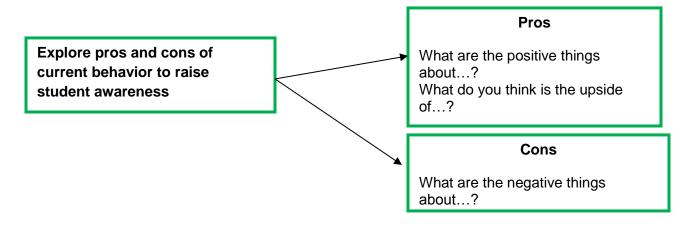
Charles: Yeah.

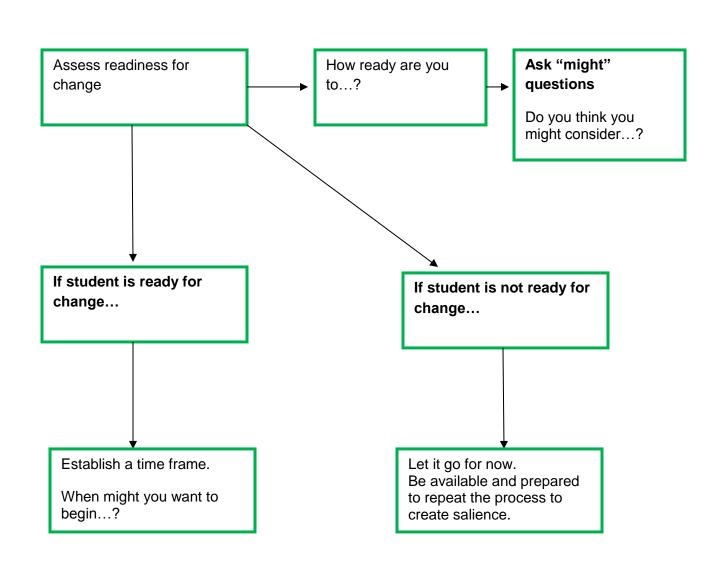
School Nurse: What do you think your next step is?

Charles: I guess I'll try riding my bike to school one day next week. Maybe I'll find someone to ride with along the way.

School Nurse: Great. I think you are making a very healthy choice for yourself. Thank you for being so willing to discuss this with me. When you come back next month for your flu shot I want to hear how things are going.

Motivational Interviewing for the Precontemplation Stage of Change¹





Motivational Interviewing for the Contemplation Stage of Change² Explore pros and cons of the new alternative behavior to raise patient awareness Cons **Pros** What are some good reasons for...? What is holding you back from What do you think are the change? advantages of ...? What do you think are the disadvantages of...? Ask DARN questions Be aware of barriers to change **D**esire: Why do you want to change? Ability: How will you do it? Lack of information or skill, Reasons: What are some reasons to misconceptions, and misperceptions, change? personal cost, environmental and **N**eed: How important is this to you? logistical barriers, and salience. How ready are you to take Assess readiness the next step? for change How will you know when you are ready? If student is ready for If student is ready for change... change... Establish a time frame Be flexible. Advise the student to consider all that When do you want to was discussed and be begin...? available for future How much time do you need discussion. before beginning to...? Schedule follow-up to move student to preparation and action stages

² Adapted from: Tellerman, K. (December 2010). Catalyst for change; Motivational interviewing can help parents to help their kids. **Contemporary Pediatrics**. 26-38.

Resources

Internet Resources for Parents

Childhood Overweight

Links to fact sheets on "Helping your Overweight Child", "Tips for Parents", "Teenagers Guide to Better Health"

win.niddk.nih.gov/publications/index.htm

A step-by-step explanation of the key concepts of the MyPyramid for Kids symbol. teamnutrition.usda.gov/resources/mpk_close.pdf

Online recipes for heart-healthy African American style foods. www.nhlbi.nih.gov/health/public/heart/other/chdblack/cooking.htm

Online recipes for traditional Latino dishes cooked in heart-healthy ways. www.nhlbi.nih.gov/health/public/heart/other/sprecip.htm

USDA's resource guide on child nutrition and health for motivated parents. www.nal.usda.gov/fnic/pubs_and_db.html

USDA site to view and order materials to help motivate children and their families for healthy eating and physical activity. www.fns.usda.gov/eatsmartplayhard/

Fitness & Physical Activity

Fitness and exercise guide with a short quiz to assess your child's activity level. www.keepkidshealthy.com/welcome/treatementguides/exercise.html

A parent handbook from the National Heart, Lung and Blood Institute, offering concrete tools and tips for parents to help their children make healthy food choices and increase their physical activity. We Can! provides ways to enhance children's activity and nutrition.

wecan.nhlbi.nih.gov

Internet Resources for Youth

Center for Science in the Public Interest interactive website with games, recipes and fast facts for teens.

www.cspinet.org/smartmouth/index1.html

Website geared toward teens with information on a number of health issues including nutrition and exercise. Website includes a BMI calculator.

www.teengrowth.com

BAM! Body and Mind is a CDC site designed for youth ages 9 to 13 with games and information on a number of health issues including food, nutrition and physical activity.

www.bam.gov/

Cookbook for teens: Fast meals and Quick Snacks. www.mch.dhs.ca.gov/reportspubs/

Internet Resources for School Nurses

Resource Links and Calculators

Centers for Disease Control and Prevention:

Information about BMI, online calculators (Adults, Child/Teen), and links to additional BMI resources, and growth charts.

www.cdc.gov/nccdphp/dnpa/bmi/index.htm

Adolescent Health Working Group

Body Basics – Adolescent Provider Toolkit that includes materials for health care providers and their patients focusing on nutrition, physical activity, body image, overweight and eating disorders among teenagers.

www.ahwg.net/resources/toolkit.htm

National Initiative for Children's Health care Quality
Childhood Obesity Action Network.
www.nichq.org/NICHQ/Programs/ConferencesAndTraining/
ChildhoodObesityActionNetwork.htm

Internet Weight Loss Programs

The following Programs were designed by registered dietitians:

USDA's Eat Smart, Play Hard initiative. www.fns.usda.gov/eatsmartplayhardkids

The purpose of Shape Up America! is to educate the public on the importance of the achievement and maintenance of a healthy body weight through the adoption of increased physical activity and healthy eating.

www.Shapeup.org

Informational Website Links

- American Academy of Family Physicians (AAFP)
 familydoctor.org/online/famdocen/home/healthy/food/kids/343.html
- American Academy of Pediatrics http://www.aap.org/obesity/
- American Dietetic Association www.eatright.org/cps/rde/xchg/ada/hs.xsl/nutrition.html
- California Medical Association Foundation www.calmedfoundation.org
- Center for Disease Control and Prevention www.cdc.gov/nccdphp/dnpa/obesity/childhood/index.htm
- Center for Medicare & Medicaid Services www.cms.hhs.gov/home/schip.asp
- National Heart Lung and Blood Institute www.nhlbi.nih.gov/health/public/heart/obesity/wecan/index.htm
- National Eating Disorders Organization www.nationaleatingdisorders.org/p.asp?WebPage_ID=294
- North American Association for the Study of Obesity (NAASO) naaso.org/information/childhood_overweight.asp
- Obesityhealth.com www.obesityhealth.com
- Obesity Help www.obesityhelp.com/morbidobesity/information/childhood-obesity/
- US Department of Agriculture (USDA) www.nutrition.gov
- US Food and Drug Administration (FDA) www.cfsan.fda.gov/~dms/wh-wght.html

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